

**REMARKS**

Claims 1-8, 10-11 and 13-16 are pending in this application. Claims 1, 5, 10, 13, 14, and 16 have been amended. Claims 9 and 12 have been cancelled. Reconsideration and allowance of the claims are requested in view of the amendment and the following remarks.

**REJECTIONS UNDER 35 U.S.C. §102(b)**

Claims 1-16 are rejected under §102(b) as being anticipated by Chao et al. (US Pub. 2004/0196946). Applicants traverse this rejection.

The Examiner essentially alleges that Chao et al. teaches all the limitation of claims 1-16. Independent claim 1 of the present application has been amended to recite that “a template having as constraints that only a fuel bundle matching the assigned fuel bundle categories to the fuel bundle positions be allowed to be loaded in the fuel bundle position” is created. In other words, through the use of a graphical user interface, a user may create a new nuclear reactor core templates.

Chao et al. teaches generating loading patterns “using the technique of constrained enumeration and the technique of Branch and Bound (B&B) mixed integer linear programming to perform comprehensive searches.” (Emphasis added) Page 3, paragraph [0025]. Chao et al. uses complex design code and integer linear programming for in-batch shuffling. Page 3, paragraph [0029]. In other words, Chao et al. teaches that programs and algorithms are used to create loading patterns. Chao et al. does not teach that a user may select through a graphic user interface to create “a template having as constraints that only a fuel bundle matching the assigned fuel bundle categories to the fuel bundle positions be allowed to be loaded in the fuel bundle position”. As recited in claim 1, the creation of the template is based on user input

**parameters**, not based on a program. Chao et al. fails to teach creating templates based on user input parameters via graphic user interface, but rather teaches that programs and algorithm are used to generate loading patterns.

For at least the reasons given above, Applicants submit that claim 1 is patentable over Chao et al. Dependent claims 2-8, 10-11, 13, and 15 are also patentable for depending on an allowable base claim.

Claim 16 is an apparatus claim, which has been amended to similarly recite the limitations of claim 1. Accordingly, for at least the same reasons claim 1 is patentable over Chao et al., claim 16 is also patentable over Chao et al.

**CONCLUSION**

In view of the above remarks and amendments, the Applicants respectfully submit that each of the rejections has been addressed and overcome, placing the present application in condition for allowance. A notice to that effect is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to contact the undersigned.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Gary D. Yacura at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY, & PIERCE, P.L.C.

By

for



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